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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/770,519

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Yoshimichi Kudo

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EXAMINER

HAILU, TESHOME

ART UNIT

PAPER NUMBER

2439

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/770,519	<b>Applicant(s)</b> KUDO ET AL.	
	<b>Examiner</b> TESHOME HAILU	<b>Art Unit</b> 2439	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 7, 8, 10 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 8, 10 and 13-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |



### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 10, 2008 has been entered.
2. Claims 1, 7-8, 10 and 13-17 have been amended.
3. Claims 2-6, 9 and 11-12 have been canceled.
4. Claims 1, 7-8, 10 and 13-17 are pending.

### ***Response to Amendment***

1. Applicant's arguments with respect to claims 1, 7-8, 10 and 13-17 have been fully considered but they are not persuasive.
2. Applicant's arguments filed on September 10, 2008 with respect to a nonstatutory obviousness-type double patenting have been fully considered in view of the amendment and are not persuasive. MPEP 804 states, "***If a 'provisional' nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending application***, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer." Since this application has other rejections, the double patenting rejection made on September 05, 2007 is maintained.

Applicant argues that the producer 30 (transmitting device) of Kuwano et al (US Pub. No. 2003/0226011) fails to initiate the first communication to the consumer 40 according to fig. 7 or Kuwano. However in

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another embodiment of Kuwano (fig. 8, step 220) the producer 30 is the one initiating the first communication.

Examiner would point out that, Kim teaches a (Page 4, paragraph 33, when data is transmitted from the CPU to the RAM, the low order 4-bit output from the CPU is encrypted by the first bit array changer). According to Kim low order 4-bit from CPU (first state) is encrypted (obfuscated) and transmitted to the RAM (second state). More over, examiner interprets "external measurement" as an access to data (signal) before encrypting (obfuscating) the data (signal). According to Kim, the low order 4-bit output from CPU is encrypted in order to prevent the access to the encrypted data (signal) out of the CPU.

Applicant argues that Rofheart et al (US 7,058,414) fails to teach the claim limitation, "measuring a time from transmission of information to said content receiving device until arrival of acknowledgement of receipt from said content receiving device in order to restrict the transmittable range of the content to within a **location or house**". Examiner disagrees.

Examiner would point out that, Rofheart teaches this limitation as (column 24, line 10-35, the local device marks a time t1 and t2 the time of transmission of a message to remote device and reception of response from the remote device respectively and calculates the round time) and (column 15, line 23-30, the processor system 201 also includes a communication interface 219 coupled to the bus 203. The communications interface 219 provides a two-way UWB data communication coupling to a network link 221 that is connected to a communications network 223 such as a local network (LAN) or **personal area network (PAN) 223**).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 7-8, 10 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwano et al (US Pub. No. 2003/0226011) in view of Rofheart (US 7,058,414).

As per claim 7 Kuwano discloses:

A method for transmitting a content between a content transmitting device and a content receiving device connected via a network, wherein in said content transmitting device, said content transmitting method comprises the steps of: (page 6, paragraph 79, an Asynchronous Connection (network) is established between producer 30 (transmitting device) and consumer 40 (receiving device) in order to transmit data from the producer to the consumer).

Authentication of receiving an authentication request from said content receiving device, authenticating said authentication request; (page 5, paragraph 79, the Consumer 40 issues a device authentication request command to the Producer 30). Also see fig 7 step 219.

Encryption of generating key information by key information generated based on information obtained by performing said authentication step, and performing an encryption process of a content transmitted to said content receiving device by said key information; (page 2, paragraph 19, the Source 130 encrypts an encryption key for encrypting the content using the calculated authentication key when the calculation of the authentication key is terminated (Step 124) and sends the encrypted key to the Sink 140).

Wherein in said content receiving device, the content transmitting method comprises the step of: authentication of issuing an authentication request to said content transmitting device, and making a pass/fail decision on the authentication of the authentication request received from said content transmitting device; (page 5, paragraph 79, the Consumer 40 issues a device authentication request command to the Producer 30) and (page 2, paragraph 19 the receiving side, issues a device authentication request to a Source 130, the sending side (Step 121). In this case, the Sink 140 sends a parameter of the receiving side towards the Source 130. The Source 130 sends a parameter of the sending side to the Sink 140 when the received parameter is correct. On the contrary, the Source 130 sends a notification which aims at rejecting the data transmission when the received parameter is not correct).

Decryption of generating key information by key information generated based on information obtained by performing said authentication process, and decrypting a content from said content transmitting device by said key information; (page 2, paragraph 19, the side of the Sink 140 decrypts the received encryption key based on the calculated authentication key (Step 127). The Source 130 encrypts the content using the encryption key and sends the encrypted content (Step 129) whereas the Sink 140 decrypts the received encrypted content).

Measuring a transmitting-end time from transmission of information to said content receiving device until arrival of acknowledgement of receipt from said content receiving device. (Page 1, paragraph 1, the present invention relates to a data transmitting apparatus and a data receiving apparatus involving a sending and receiving of digital data such as video content and audio content as well as a data transmission method and a data transmission system, especially to a technique of a copyright protection for the video content and others in data transmission).

Kuwano fails to disclose the method of measuring time between the transmission of information and reception of acknowledgement. However, on the same field of endeavor, Rofheart teaches this limitation as, (column 24, line 10-35, the local device marks a time  $t_1$  and  $t_2$  the time of transmission of a message to remote device and reception of response from the remote device respectively and calculates the round time).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention was made, to modify the teaching of Kuwano and include a method of measuring a time between the transmission of information and reception of acknowledgement using the teaching of Rofheart in order to determine if the remote (receiving) device is in the same network domain (area) as the local (transmitting) device by calculating the round time of message (data) transmission of message and reception of acknowledgment.

Measuring a receiving-end time from transmission of an authentication request to said content transmitting device or a time from when transmission of a response to the authentication request of said content transmitting device until arrival of acknowledgement of receipt from said content transmitting device, wherein when a measured said transmitting-end time larger than a predetermined value, said authenticating means decides that the authentication of said content receiving device is a failure, so that the transmittable range of the content is restricted to within a location or house in which said content transmitting device is placed, listening a viewing of the content is restricted, and copying of the content is limited to personal use. (Page 3, paragraph 33, a device authentication unit operable to perform a device authentication so that the data transmitting apparatus may authenticate the data receiving apparatus).

Kuwano fails to disclose the method of measuring time between the transmission of authentication request and the response to the authentication request. However, on the same field of endeavor, Rofheart teaches this limitation as, (column 26, line 1-10, the processor 205 determines whether the distance for a particular remote device is less than, equal, or greater than the authentication criteria by calculating time, for example. If the results of a comparison for a particular remote device indicate that the remote device does not satisfy the authentication criteria, then communications are blocked with that remote device as seen in step 809. On the other hand, if the results of a comparison for a particular remote device indicate that the remote device does satisfy the authentication criteria, then communications are enabled for that remote device as seen in step 811) and (column 15, line 23-30, the processor system 201 also includes a communication interface 219 coupled to the bus 203. The communications interface 219 provides a two-way UWB data communication coupling to a network link 221 that is connected to a communications network 223 such as a local network (LAN) or **personal area**



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**network (PAN) 223).** The distance to authenticate the remote device is calculated using the round trip time (see column 25. line 10-17).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention was made, to modify the teaching of Kuwano and include a method of measuring a time between the transmission of authentication request and the response to the authentication request using the teaching of Rofheart in order to substitute one method for the other to achieve the same end result of authenticating a device and secure the data transmission.

Claims 1, 8, and 10 are rejected under the same reason set forth in rejection of claim 7:

As per claim 2 Kuwano in view of Rofheart discloses:

A content transmitting device according to Claim 1, wherein when the measured time is larger than a predetermined value, said authenticating means decides that the authentication of said content receiving device is a failure so as to restrict the transmittable range of the content to within a location or house in which said content transmitting device is placed. (According to Rofheart column 26, line 1-10, the processor 205 determines whether the distance for a particular remote device is less than, equal, or greater than the authentication criteria by calculating time, for example. If the results of a comparison for a particular remote device indicate that the remote device does not satisfy the authentication criteria, then communications are blocked with that remote device as seen in step 809).

As per claim 13 Kuwano in view of Rofheart discloses:

A content transmitting device according to Claim 1, wherein said timer means further measures a second time from when an authentication response responding to said information from said content receiving device is transmitted from said content transmitting device until acknowledgement of receipt from said content receiving device.

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(Page 1, paragraph 1, the present invention relates to a data transmitting apparatus and a data receiving apparatus involving a sending and receiving of digital data such as video content and audio content as well as a data transmission method and a data transmission system, especially to a technique of a copyright protection for the video content and others in data transmission).

Kuwano fails to disclose the method of measuring time between the transmission of information and reception of acknowledgement. However, on the same field of endeavor, Rofheart teaches this limitation as, (column 24, line 10-35, the local device marks a time  $t_1$  and  $t_2$  the time of transmission of a message to remote device and reception of response from the remote device respectively and calculates the round time).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention was made, to modify the teaching of Kuwano and include a method of measuring a time between the transmission of information and reception of acknowledgement using the teaching of Rofheart in order to determine if the remote (receiving) device is in the same network domain (area) as the local (transmitting) device by calculating the round time of message (data) transmission of message and reception of acknowledgment.

Claims 16 and 17 are rejected under the same reason set forth in rejection of claim 13:

As per claim 14 Kuwano in view of Rofheart discloses:

A content transmitting device according to Claim 13, wherein when said content transmitting device receives the authentication request from said content receiving device and transmits an acknowledgement of receipt to said content receiving device, said content receiving device measures a third time from when said authentication request is transmitted to said content transmitting device until acknowledgement of receipt from said content transmitting device. (Page 3, paragraph 33, a device authentication unit operable to perform a device authentication so that the data transmitting apparatus may authenticate the data receiving apparatus).

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Kuwano fails to disclose the method of measuring time between the transmission of authentication request and the response to the authentication request. However, on the same field of endeavor, Rofheart teaches this limitation as, (column 26, line 1-10, the processor 205 determines whether the distance for a particular remote device is less than, equal, or greater than the authentication criteria by calculating time, for example. If the results of a comparison for a particular remote device indicate that the remote device does not satisfy the authentication criteria, then communications are blocked with that remote device as seen in step 809. On the other hand, if the results of a comparison for a particular remote device indicate that the remote device does satisfy the authentication criteria, then communications are enabled for that remote device as seen in step 811). The distance to authenticate the remote device is calculated using the round trip time (see column 25. line 10-17).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention was made, to modify the teaching of Kuwano and include a method of measuring a time between the transmission of authentication request and the response to the authentication request using the teaching of Rofheart in order to substitute one method for the other to achieve the same end result of authenticating a device and secure the data transmission.

Claim 15 is rejected under the same reason set forth in rejection of claim 14:

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TESHOME HAILU whose telephone number is (571)270-3159. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teshome Hailu

November 21, 2008

/Kambiz Zand/  
Supervisory Patent Examiner, Art Unit 2434